



Cambridge International Examinations
Cambridge Pre-U Certificate



GEOGRAPHY (PRINCIPAL)

9768/03

Paper 3 Geographical Issues

For Examination from 2016

SPECIMEN PAPER

2 hour 45 minutes

Additional Materials: Answer Booklet/Paper

READ THESE INSTRUCTIONS FIRST

If you have been given an Answer Booklet, follow the instructions on the front cover of the Booklet.
Write your Centre number, candidate number and name on all the work you hand in.
Write in dark blue or black pen.
You may use an HB pencil for any diagrams, graphs or rough working.
Do not use staples, paper clips, glue or correction fluid.
DO NOT WRITE IN ANY BARCODES.

Answer **five** questions.

Two questions must be answered from **each** of Sections A and B.

One question must be answered from Section C.

Candidates are encouraged to support their answers with appropriate examples, sketch maps and diagrams.

The Insert contains all the Figures and the Photographs referred to in the questions.

At the end of the examination, fasten all your work securely together.
The number of marks is given in brackets [] at the end of each question or part question.

The syllabus is approved for use in England, Wales and Northern Ireland as a Cambridge International Level 3 Pre-U Certificate.

This document consists of **4** printed pages and **1** Insert.

Section A

Answer **two** questions from this section.

Tectonic Hazards

- 1 Fig. 1 shows vertical drop and horizontal travel distance of three volcanic mass movement processes.
- (a) Define the term *pyroclastic flow*. [2]
 - (b) Describe the relationship between the three processes and horizontal travel distances shown in Fig. 1. [4]
 - (c) Explain the importance of understanding the nature of volcanic mass movements and how far they travel. [5]
 - (d) Assess the effectiveness of methods of predicting volcanic eruptions. [9]

Meteorological Hazards

- 2 Photograph A shows flooding in Myanmar caused by tropical storm Nargis on May 2, 2008. Photograph B shows the same tropical storm as it moved towards land.
- (a) Using Photograph A, identify **two** secondary hazards associated with a storm surge. [2]
 - (b) To what extent is it possible to predict the track of a tropical storm, such as that shown in Photograph B? [4]
 - (c) With the aid of Photograph B, describe and explain the main characteristics of tropical storms. [5]
 - (d) To what extent is it possible to modify the impact of tropical storms? [9]

Hydrological Hazards

- 3 Figs 2A and 2B show 48 hour rainfall in millimetres over England and Wales. Fig. 2A is for 24–25 June 2007, when flash flooding occurred. Fig. 2B is for 19–20 July 2007, which caused prolonged flooding.
- (a) Describe the characteristics of a flash flood. [2]
 - (b) Compare the patterns of rainfall shown in Figs 2A and 2B. [4]
 - (c) With reference to Figs 2A and 2B, suggest reasons why prolonged flooding occurred after 19th July 2007. [5]
 - (d) Discuss how the impacts of flooding vary between countries at different levels of economic development. [9]

Section B

Answer **two** questions from this section.

Crime Issues

- 4 Fig. 3A shows the relative incidence of crime for June 2011 for an outer suburb of Birmingham, England, and Fig. 3B that for the central business and entertainment centre of the same city for the same period.
- (a) Suggest **two** crimes that would be included in the category 'anti-social behaviour'. [2]
- (b) Compare the patterns of crime shown in Figs 3A and 3B. [4]
- (c) Suggest reasons for the differences in patterns of crime identified in (b). [5]
- (d) 'Public perception of the level of crime hazard often differs from the pattern of actual crime incidence.'
- To what extent do you agree with this statement? [9]

Health Issues

- 5 Fig. 4A shows the infant mortality rate for countries in Africa for 2006, and Fig. 4B shows malnutrition rates for the same countries for 2006.
- (a) Define the term *infant mortality rate*. [2]
- (b) To what extent is there a relationship between the patterns shown on Figs 4A and 4B? [4]
- (c) Suggest the socio-economic factors that might account for the pattern of malnutrition shown on Fig. 4B. [5]
- (d) Critically examine the ways in which governments attempt to influence lifestyle choices which affect health. [9]

Spatial Inequality and Poverty Issues

- 6 Fig. 5 shows the percentage of total population **living on** less than **US\$1.00** a day, in selected regions of the world, between 1981 and 2004.
- (a) Name **two indices of poverty** other than that shown in Fig. 5. [2]
- (b) Compare the trends shown on Fig. 5 for Sub-Saharan Africa, East Asia and Pacific, and South Asia. [4]
- (c) How might long term environmental degradation affect the incidence of poverty within one of the regions shown in Fig. 5? [5]
- (d) Assess the success of strategies to alleviate poverty in countries at lower levels of economic development. [9]

Section C

Answer **one** question from this section.

- 7 Examine the view that it is better for governments to concentrate on the mitigation of geographical hazards rather than their prediction. [25]
- 8 With reference to an area you have studied, assess how the impacts of specific geographical issues are related to their nature and location. [25]
- 9 'Development reduces peoples vulnerability to geographical hazards and issues.' Discuss the validity of this statement. [25]

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- Question 2 Photograph A © Ref: BATCTX; Mark Pearson; *Junk boat travels up the Ayeyarwady Delta after Cyclone Nargis struck Myanmar between the 2nd and 3rd of May 2008*; www.alamy.com.
- Question 2 Photograph B © *Tropical Cyclone Nargis (01B) in the Bay of Bengal*; http://rapidfire.sci.gsfc.nasa.gov/gallery/?2008122-0501?Nargis_A2008122.0440.250m.jpg; 2008.
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